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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,748	04/13/2006	Kenichi Nagayama	46969-5439	5122
23973 7590 05/29/2007 DRINKER BIDDLE & REATH ATTN: INTELLECTUAL PROPERTY GROUP ONE LOGAN SQUARE 18TH AND CHERRY STREETS PHILADELPHIA, PA 19103-6996			EXAMINER HANLEY, BRITT D	
			ART UNIT 2809	PAPER NUMBER
			MAIL DATE 05/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/575,748

Applicant(s)

NAGAYAMA ET AL.

Examiner

Britt Hanley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/05/2006 &amp; 06/27/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

- [01] A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
- [02] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
- [03] The following title is suggested: 'Organic Electroluminescent Display Panel with Reduced Pixel Leakage Current'.

### *Drawings*

- [04] Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- [05] The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 34. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add

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the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**[06]** The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: '23' in [0138]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

**[07]** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**[08]** Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**[09]** Constant 'a' is contained in all claimed formula and not limited by the claims. Therefore, 'a' can take any value from zero to infinity. When 'a' approaches infinity, the sheet resistances approach zero, and when 'a' approaches zero, sheet resistances approach infinity. Any material can read on this unlimited range of sheet resistances.

***Claim Rejections - 35 USC § 102***

**[10]** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**[11]** Claims 1-6 is rejected under 35 U.S.C. 102(b) as being anticipated by Nagayama et al (GB 2 332 985 A).

**[12]** Regarding claim 1, an organic electroluminescence display panel (title) comprising a plurality of organic electroluminescence elements (see at least fig. 1), each of the elements

comprising first and second display electrodes (2, 1, fig. 1) and at least one of organic function layers (3, 4 fig. 1) including an emission layer (“organic EL layer 3 comprising a hole transporting layer and light emitting layer”, page 7- page 8) comprising an organic compound, the function layers being sandwiched and stacked between the first and second display electrodes (shown in fig. 1), and a substrate (6, fig. 1) supporting the plurality of organic electroluminescence elements; wherein the organic function layers include at least one common layer (3, 4, fig. 1) that is formed commonly for the plurality of organic electroluminescence elements and has charge transport properties (4, fig. 1), and the common layer has a gap filling part (‘gap regions’, 4, fig. 1) extending among the plurality of organic electroluminescence elements.

[13] Regarding claims 2-6, since the gap region (GR, fig. 1) is made of a material, the gap region’s resistance falls within the allowable range of  $\sim 0$  Ohms to  $\sim \infty$  Ohms.

### ***Conclusion***

[14] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

[15] Nagayama et al. (US 2001/0011867 A1): Disclosed is an organic EL display panel comprising: a substrate; a plurality of anode layers laminated on said substrate in a laminating direction and arranged with intervals in a direction perpendicular to the laminating direction; a high polymer layer laminated on said anode layers; an organic EL layer laminated on said high polymer layer; and a plurality of cathode layers laminated on said organic EL layer in a laminating direction and arranged with spaces in a direction perpendicular to the laminating

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direction, wherein said high polymer layer comprises: an energizing region facing said cathode layers; and a gap region disposed between said adjacent anode layers, wherein said gap region has a conductivity lower than said energizing region.

[16] Nagayama et al. (US 6,285,124 B1): An organic EL display panel having a substrate; a plurality of anode layers laminated on the substrate in a laminating direction and arranged with intervals in a direction perpendicular to the laminating direction. A high polymer layer is laminated on the anode layers; an organic EL layer is laminated on the high polymer layer; and a plurality of cathode layers is laminated on the organic EL layer in a laminating direction and arranged with spaces in a direction perpendicular to the laminating direction. The high polymer layer has an energizing region facing the cathode layers, and a gap region is disposed between the adjacent anode layers. The gap region has a conductivity lower than the energizing region.

[17] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Britt Hanley whose telephone number is (571) 270-3042. The examiner can normally be reached on Monday - Thursday, 6:30a-5:00p ET.

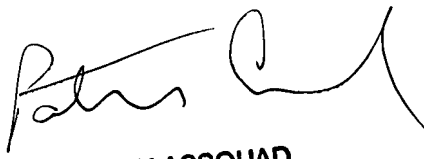
[18] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

[19] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information

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about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bdh



PATRICK ASSOUD  
SUPERVISORY PATENT EXAMINER